

REMARKS

Claims 1 and 6 have been rejected under 35 U.S.C. § 103(a) as unpatentable over Hosken (U.S. Patent No. 4,265,002) in view of Poupitch (U.S. Patent No. 2,650,516). In addition, Claims 3 and 4 have been rejected under 35 U.S.C. § 103(a) as unpatentable over the same two references and further in view of Hall (U.S. Patent No. 2,419,134) and Claims 5 and 8-10 have been rejected over Hosken, Poupitch and Hall, and further in view of Le (U.S. Patent No. 4,789,287). However, for the reasons set forth hereinafter, Applicants respectfully submit that all claims which remain of record in this application, including new Claims 11-13, distinguish over the cited references, whether considered separately or in combination.

The primary Hosken reference discloses a magnetic fastening arrangement, of the type such as might be used, for example, in place of a button or "snap" for holding the flap of a shirt or a purse in place. For this purpose, as best seen in Figures 2 and 3, the fastener arrangement according to Hosken includes upper and lower fastening members 6, 8, one of which is attached to each "flap" (that is, the two pieces of material which are to be fastened together) by means of a thermal plastic strip 2, 4 (presumably for strengthening). Each of the upper and lower fastening members 6, 8 comprises a thermal plastic supporting cup 10, 34 which includes an annular magnet 30, 52.

The upper fastening member 6 includes a ferromagnetic plate 20 which has a ferromagnetic post 26 projecting downward therefrom. Correspondingly, the lower fastening member 8 also has such a ferromagnetic plate 43. In order to fasten the two flaps together, as shown sequentially in Figures 2 and 3, the post 26 is inserted into the central opening in the annular magnet 52 so that it is drawn into engagement with the surface 44 of the lower plate 43, thereby holding the upper and lower fastening members 6 and 8 together. (See Column 5, lines 3-16.)

An important aspect of the Hosken reference is that it discloses a device simply for holding two fabric flaps or the like together, and is not suitable for determining the location of a hole in a metallic component or body part, such as disclosed and claimed in the present application. More particularly, ease of fastening is an important feature of the apparatus. Thus, as noted at Column 3, lines 44-47, the ferromagnetic post 26 has a cross sectional area that is smaller than the area defined by the apertures 5 and 9 through which it must fit. As a result of this arrangement, as can be seen in Figure 3, there is considerable play between the post 26 and the sides of the holes 5, 9 as well as the inner radius of the annular magnets 52 and 30. Thus, as noted in the specification at Column 5, lines 10-15, if the person attempting to fasten the two flaps together fails to engage the aperture 9 in the central opening in the magnet 52, an easy adjustment will suffice, because the alignment between the post and the holes

“need only be approximate to result in an appropriate engagement”. (Column 5, lines 13-14.)

This feature of the invention, which makes it particularly advantageous and easy to use as a connector, renders the Hosken apparatus unsuitable for use in locating a hole in a metallic part. In this regard, the Office Action states at item 8 on page 5 that placement of the device on the article, by virtue of its existence, determines the position of the hole. However, due to the intentional provision of a significant amount of play between the post 26 and the holes 5, 9 in Hosken, a person skilled in the art would not utilize this arrangement for the purpose of locating holes in the manner claimed in the present application, due to its inherent and intentional imprecision.

A second feature of the present invention which is also missing in Hosken is contained in the last paragraph of independent Claims 1, 10 and 11. In particular, these claims further specify that with the spike fitted into the hole whose location is to be determined, the magnetic attachment means holds the spike in the hole by magnetic attraction forces between the magnetic attaching means and the body part. The present invention is thus simpler and less costly than the Hosken fastening arrangement, which requires a second set of magnets and a second fastening member 8, in order to fasten the two parts together.

The Poupitch reference, on the other hand, discloses a “dash liner clip” of the type which is used to secure articles to the floor or dash panel of a vehicle. For this purpose, the dash liner clip according to Poupitch has a series of protuberances or teeth 38 arranged on a shaft, such that when the shaft is inserted into a hole, the protuberances or teeth lock it in place. It is important to note in this regard that the purpose of the dash liner clip in Poupitch is to permanently fix parts together. Thus, the specification indicates at Column 1, lines 36-37 and Column 3, lines 29-30 that the fastener according to the invention must be capable of withstanding relatively great shear forces. In addition, at Column 4, lines 27-30, the specification further states that once inserted in the workpiece assembly, the dash liner clip “locks itself in position and cannot be removed without application of considerable force thereto”. On the other hand, the purpose of the Hosken apparatus is to provide a fastener which can easily be undone, to take the place of a button or snap. Accordingly, a person skilled in the art would not look to Poupitch for the purpose of modifying the Hosken apparatus. Moreover, were the Hosken device modified, such as might be suggested by Poupitch, in order to make the post 26 fit snugly within the annular opening in the magnets 30 and 52, such modification would frustrate the objective of Hosken providing a fastener which has sufficient play in order to make it easily connected. A person skilled in the art would therefore not be motivated to modify Hosken in this manner.

Even more to the point, the Poupitch reference also fails to teach or suggest the features recited in the final paragraph of Claims 1, 10 and 11, in which the magnetic attaching means holds the spike in the hole by means of magnetic attraction forces between the magnetic attaching means and the body part or other metallic component.

The Hall reference, on the other hand, has been cited as disclosing a locator which is utilizable in forming metal articles with a shell section with interior screw threads for accepting a threaded connector to secure the shell to the connector. Accordingly, like Poupitch, it also fails to teach or suggest a modification of Hosken such as would replicate the two features referred to above, which are missing in Hosken. Moreover, to the extent that Figure 2 in Hall discloses an arrangement in which the stem 4 of the locator fits snugly within the sides of the hole, the same comments made with regard to Poupitch also apply to Hall. That is, any such modification of Hosken would clearly have a detrimental effect on its operation. Therefore, a person skilled in the art would not do so.

Finally, the Le patent has been cited as disclosing a through bolt with an asymmetric head to allow fastening in otherwise inaccessible locations. Insofar as Applicants have been able to determine, nothing contained in Le supplies those features of the invention, discussed previously, which are missing in Hosken, Poupitch and Hall.

For the foregoing reasons, Applicants respectfully submit that all claims which remain of record in this application distinguish over the cited references and are allowable.

In light of the foregoing remarks, this application should be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #038738.49355).

Respectfully submitted,



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